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WHIRRAKEE

December 2008 Vol. 29 No. 11

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MONTHLY NEWSLETTER OF THE BENDIGO

FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.
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Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $34; Family $40; Concession: Single $28.50; Family $34. *Whirrakee* subscription only is $34.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. The invited speaker at general meetings starts at 8:00pm and meetings conclude with supper.
If a workshop is held prior to the meeting, it will be advertised and it usually starts at 7.00pm.
The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 7:30pm. Members of the Committee are the Office Bearer listed above and the following members: Bob Ruddick, Ben Goonan, Jaydon Hoskin, Liz Graham, Diana Collier. *More committee members are urgently sought, see page 4.*

Excursions are conducted regularly and are advertised on the diary page of the *Whirrakee*. The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. In addition to local excursions, campouts are held several times each year, usually coinciding with long weekends or holiday periods.

The Bendigo Field Naturalists Club has one active group that meets regularly (the Fauna Study Group) and other groups that meet at irregular intervals.

Fauna Study Group: meets on the fourth Wednesday of the month at 7:30pm in the Golden Square Senior Citizens Building.
Chairman: John Burtonclay, Fadersons Lane, Mandurang (5439 5710)
Secretary: Bill Holsworth, 13 Nabilla Crs., Bendigo (5443 4063)
Equipment Officer: Maurie Lewis (0407 427179)

Bird Observers Group: This group has field excursions and the occasional lecture evening. Please consult the *Whirrakee* for details. Special bird observations should be reported to Anne Bridley 5449 3479.
To propose meetings or excursions please contact Kerrie Norris 5447 8017.

Front cover photo?...see page 2.

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club
Vol. 29, No. 11, December 2008
Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*) which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles. Contributions will be included as soon as possible after they are received, although articles received more than one week after the monthly General Meeting will probably be too late for inclusion in the next issue of *Whirrakee*.

Editor's Note
I do hope many of you will come to the Christmas dinner in December and hear Peter Ellis talk about one of his favourite subjects. For those of you who have not been to one of these dinners, the food is brought by everybody and is absolutely delicious. Christmas cheer is supplied, but you need to bring everything else – a very nice way to end the club year. There will not be a Whirrakee in January, so I hope that by February everybody has stories to tell and photos to send in. Now that the entire Whirrakee is electronically delivered to the printery and the photo quality has gone up by an order of magnitude (did you notice it in the last edition?), we can finally do your photos justice. Pity it only happened at the end of Darren Green's reptile series! The next step might be to begin linking these electronic issues to our website in such a way that members (or everybody?) can look up older issues. The committee might take this up if there is any enthusiasm for such a project out there. Anyway, have a great holiday and thanks for all your contributions this year.

Front Page Illustration – Photographer: Brigid Glaisher
This frog was found buried in a compost heap at Axedale at the end of October, luckily it was not injured by the shovel. As to its identity, Tom Burton wavered between a *Neobatrachus* sp. (due to its vertical pupil), possibly *N.sudelli* (a species in much need of revision) and a Pobblebonk, *Limnodynastes dumerili*. The detail required to decide is on the back foot (the presence/absence/colour of the metatarsal tubercle or 'spade') and this is not visible from the photo. No matter what its name, though – it is a very attractive frog!

Short notices

Help save the Alps from hawkweed

Parks Victoria is calling for volunteers this summer to search for Hawkweed on the Bogong High Plains in the Alpine National Park. Both King Devil and Orange Hawkweed are highly invasive plants, and it is important to control infestations before they spread across the High Plains.

There will be four survey sessions of approximately five days each during Hawkweed flowering times in December and January.

Accommodation will be provided at Falls Creek alpine village, with breakfast and snacks included, but otherwise you should be self-sufficient.

For more information contact Ann Stray on (03) 5754 4693
or email astray@parks.vic.gov.au

Project Hindmarsh honoured in Landcare awards

A hugely successful project to link the Big and Little deserts in western Victoria by planting hundreds of kilometres of native bush has been honoured at this year's National Landcare Awards.

The Hindmarsh Landcare Network, which every year sees busloads of people trucked up from Melbourne to help plant wildlife corridors and restore native bush on private farming properties, was honoured this month with the CarbonSMART Nature Conservation Award.

Established by the Hindmarsh Landcare Network in 1997 the project has created unique links between country Victorians and people from Melbourne through its annual tree planting weekend.

Both articles from 'The Victoria Naturally Alliance' ebulletin No 17.

More Committee members needed

by Anne Bridley, BFNC secretary

For BFNC committee meetings, we need to have a quorum. If meetings in any one month are non-quorate, they cannot proceed. To avoid such situations, we need another couple of members so that any essential club business can be done. Members who have served for many years rightly feel that they have done their bit. So we now have an opportunity for younger or newer members to have their say in this vital aspect of running our club.

Contact Anne Bridley (5449 3479) or Glenise Moors (54396254) for more information.

Also…

More rescuers and telephone operators are needed for the Wildlife Rescue & Information Network

After 11 years of operation, WRIN has found that its workload has increased to the point that more rescuers and telephone operators are needed.

Training will be provided by experienced WRIN members, and any time that can be given will be most appreciated.

If you feel that you can help, the Rescue phone no is 0419 356433
or email secretary@wrin.asn.au

Dingoes thrown a lifeline

(from The Victoria Naturally Alliance ebulletin No 17)

"Dingoes will be listed as a threatened species in Victoria under a state government move to protect the animal from extinction. Breeding with wild dogs and habitat destruction has decimated dingo populations in Victoria, with the dog only surviving in two isolated pockets of the state."

Opinions about the benefit of this move vary, so here is your question: Should precious conservation money be spent on the dingo? What do you think? (editor)

Rosalind Park Nursery **No. 3**

Sent in by Jan Orr

This article was one of a series of 4 about the Rosalind Park Fernery. It was published on 18.2.1893 in the 'Bendigo Advertiser'. Jan has copied it as it was written and spelt (she was intrigued that in 1893 the writer used the American spelling for colour). Part of this article was read to the general meeting in November, but as it is a really interesting glimpse into the prevailing attitudes of those times, it is reproduced here in full.

"Besides the varied and beautiful collection of ferns in the green house of the nursery under the care of Mr. Gadd, in Rosalind Park, there are many other attractive, as well as rare, plants. One prominent feature is a collection of 60 of the best camellias. When in bloom the flowers are magnificent, and they make a show not surpassed anywhere in Victoria. The collection of foliage plants is also exceedingly good, particularly the begonias. On their broad leaves the tracery splashes and rainbow-like rims of color are as remarkable as they are beautiful in their various and blending tints. Other smaller leaved plants, in various colors of red and green, with the vein-like skeleton of the leaf showing distinctly in more prominent trees, are as beautiful as a flower. The pitcher plant is a novelty, and the metal plant, with its oval-shaped leaf, some 12 inches long by 6 inches wide, is well named, as its glossy dark green shaded colors convey at once the idea of burnished metal. The silver tree from the Cape of Good Hope is another curiosity, its lance-like leaves, three inches long of light green color, having all the lustre of the finest silk. There is a specimen of the new fuchsia, the *Triphy folia*, the present fashionable flower in the old country. The flower is delicate looking, two inches long, trumpet shape, half an inch across the mouth, and of a beautiful scarlet color. But there is another remarkable member of the floral kingdom now in bloom. It is a creeper called the moon plant, from the fact that its flower is white, circular in shape like the full moon, and supported by five narrow light bands extending from the centre to the circumference. Like the Queen of the Night, the flower is some four inches in diameter, is seen to best advantage in the dark. About midnight it is fully opened, and continues so until late in forenoon next day, when it gradually curls inwardly and closes. There is a pink variety, but the white one is rare. It throws many flowers, and is very beautiful in the lightness of the color and delicacy of the bloom. It belongs to the Ipomea family. Another very fine and rare creeper called the lapageria is also in bloom. The flower is bell shape of a red rose color, three inches long and two inches wide at the rim. That and the moon plant would make a fine display in a verandah. An interesting and elegant plant is the banana etna. It is grown for its graceful foliage. The leaf is very large. The finest and largest specimen of it in Victoria is to be seen in the garden of Mr. Jones, Mollison street. A plant of the fruit yielding banana is also in the green house. It was obtained from Queensland the only place where it grows to perfection in Australia. The fruit of course is well known as most nourishing, and very suitable for children. Tons of it from the South Sea Islands are consumed in Victoria. A cocoanut palm is to be seen amongst the palms, of which there are 25 varieties. It is from a nut planted by Mr. Gadd. A wine palm is an attraction, the leaves being long and thin, and garter-like.

Attached to the greenhouse are two aviaries. One contains a collection of parrots - the red wing, lorry, rock pebble, and the white rosella. The golden pheasant, one of the most beautiful birds, is also there in all the glory of his splendid plumage. He has a rival, however, in the mandarin duck, whose plump figure and gorgeous topknot is a marvel of beauty. The silver pheasant forms one of the happy family, which also includes the Japanese partridge - the size of a pigeon - which has a red beak, green wings with black stripes, and slate-colored breast. The sumptuous repast of "quail on toast" is brought to mind by the presence of the Californian quail, a bird with a topknot, and plump enough looking to make the mouth of a gourmand water. A Japanese pheasant is also

there, spotted like a lark. The African mockingbird is also amongst the number, and its powers of imitation are something wonderful. But the most singular in the collection is another bird from the dark continent. Its name is unknown, but it has a red beak, black head and neck, slate color wings, bluish inside, long drab colored tail with black spots at end. It is something after the appearance of the English jay, and is a most restless, vicious, fighting, looking bird. It is also a mocking bird, and uses its powers in this respect to entice sparrows within its clutch. It can imitate almost anything, but it delights in giving a most realistic performance of a fight between a dozen sparrows, and that is row and variety enough, goodness knows; but the imitation is so perfect that any person listening to it without seeing the bird would at once wonder what all the rumpus amongst the sparrows was all about. The sparrows themselves are deceived, and as they are ever alert for a spree or a fight they come along for the fray, but their pugnacious curiosity is fatal to them, for when near enough their arch-enemy, like the devil himself coming upon a patch, seizes one by each piercing claw, each wing covers a victim, a fifth is held with its relentless beak, and he would, it is believed, squash a sixth on the ground with the combined weight if the chance offered. The hullabaloo with the accompanying imitations under the circumstances can be imagined but not described. Once grabbed it is death to the sparrow. That is the sort of bird for this colony, and the Acclimatisation Society should lose no time and spare no money in importing a ship load - there is work for them all. It will make some amends for their blunder in giving us the house instead of the hedge sparrow. In the second aviary are a number of small birds. These include the American cardinal, a lively whistler, and the indigo blue bird. Canaries are amongst the lot, and there are also two young blackbirds, which will be liberated by-and-by. But the wonderful birds are two American weavers, about the size of sparrows and of pinkish color, with black bills. They are astonishingly clever in their particular line. If a wire basket, some six inches in the ball, such as is used for ornamental plants, is hung in the cage, and they are supplied with long, thin grass or cocoanut fibre and moss they will sew the moss on to the basket in the most workman like manner in a couple of hours. One is on the outside and the other is on the inside. The outsider has the thread near the end with his bill, and the other puts the moss fibre or short grass on the wire. The end of the thread is pushed through and is seized by the inside bird, which draws it tight and then pushes the end back again so as to hold the moss. The laying on of the moss and the forward and backward sewing process goes on until the covering of the basket is finished, when the birds make a critical inspection of the work, and go off rejoicing when all is found to their satisfaction. They are economisers of labor in their work, for if the thread is a long one they only pull it half way through, as the work of pulling the whole length would be too great, and when the one half is used up, they continue with the other half."

Tasmanian Tiger Tales

This is a summary of an article supplied by Clive Fisher. It was published in the SUNDAY TASMANIAN on April 16, 2008. A large and intriguing (but fuzzy) picture accompanied the article

Two German tourists, Klaus Emmerichs and Birgit Jansen, toured Tasmania in February this year. They had visited Cradle Mountain and were heading towards Zeehan. On February 3, they drove down a dirt road to spend the night in the bush and Mr Emmerichs went down an embankment of a small creek. There he saw an animal, he said, he had never seen before. He commented on the snuffling noise the animal made, and reported that there may have even been two of these animals near him. Mr Emmerichs took a photo but the animal was startled by the noise of the camera and went off into the bush. He saw it for only about 30 seconds.

The tourists commented that they had seen the picture of the tiger on the bottle of Cascade beer, but had not realised its importance.
The couple did not take the matter any further until they returned to Melbourne weeks later and showed the picture to Mr Emmerichs' brother who had been living in Australia since the 1970s. He was convinced it was of a tiger and drew up a deal with *The Age* newspaper. The tourists returned home and left the photograph and any further legal dealings with Mr Emmerichs' brother. *The Age* never published the photograph as several doubts were raised about its authenticity.

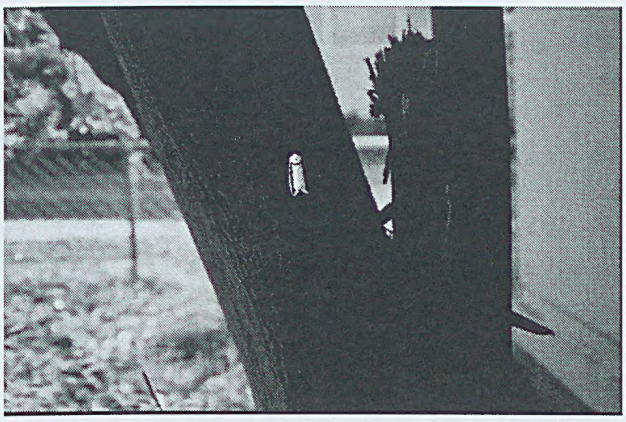
Mr Col Baily, a thylacine expert who runs a tiger research centre in Tasmania, 'is 50/50 on this', the SUNDAY TASMANIAN reports. Investigations are presently occurring, in fact, the German couple has returned to Tasmania since, to prove that their photos are no fake.

... Clive (and I am sure many others) is fascinated by the topic, so hopefully, he will keep us informed of any further developments in this case.

Unknown moth in Bendigo garden

Clive Fisher found a stunning moth in his garden moving over the leaf litter and then crawling up the stem of his Cootamundra Wattle. Can anybody identify it from these pictures? Clive says the length from 'head to toe' was about 2 inches.

Walking over the leaf litter...



...climbing up the Cootamundra Wattle

Photographer: Clive Fisher

November 'Thing of the Night'
John Burtonclay: Eltham Blue Butterflies at Big Hill

by Sabine Wilkens

Some members of the club have been helping Julie Whitfield, a student at BRIT, to locate and count caterpillars of the Eltham Blue Butterfly at Big Hill.

This is a species from the family Lycaenidae and is considered 'vulnerable' in Victoria. Its food plant is Sweet Bursaria, *Bursaria spinosa* (possible only the dwarf form of it) and what make this butterfly especially interesting is the close association it has with ants of the genus *Notoncus*. John had an extreme close-up of an ant on somebody's hand (they don't bite!) and estimated them to be 3-4mm long. The caterpillars have a slug-like appearance. They are 12-15mm long on average, flattened in cross-section and generally slow moving.

The ants house the caterpillars in their nests, which are usually located at the base of the *Bursaria* plants. In this way, the caterpillars are protected from the elements and predators during the day. At night, groups of ants will shepherd caterpillars up the bush so they can feed in the relative safety of the dark.

The ants get their reward from sweet secretions, exuded by glands on the caterpillars' skin. The *Bursaria* plant may be the only one in the threesome that gets no reward from this association?

A passer-bye at Big Hill might be wondering what these strange and busy people are doing late in the evening, bending over spiny bushes…

During these nights at Big Hill, each plant on which caterpillars are found is tagged and the number of caterpillars is recorded. The ants are quite common, so is *Bursaria spinosa* (although the dwarf variety may not be), yet the butterfly is very uncommon. For this reason it is important to map the extent of the caterpillars in that location. To an outsider this piece of bushland looks quite degraded ('pretty awful really' according to John Burtonclay), yet it harbours this extraordinary and rare association. The key will be to determine why the butterflies use this particular patch of bushland to lay their eggs.

A great on-line magazine, 'Scribbly Gum' by the ABC (June edition), has quite a lot of well-presented and fascinating information on this association. Just go to:
http://www.abc.net.au/science/scribblygum/june2003/default.htm
and enjoy!

November General Meeting
Speaker: Jim Radford 'Woodland birds and their habitat requirements'

By Sabine Wilkens

This talk was presented by Jim Radford, a familiar speaker to many club members. In fact, at the end of the talk, Jim got presented with our club mug and he mentioned that it was the third one! This time, Jim was wearing a different hat, though. He now works for Bush Heritage Australia, an Australia-wide organisation.

The topic of the night was the status of Victorian bushland birds and their changes in numbers over time.

What really are the consequences of habitat degradation, fragmentation and ultimately habitat loss for birds, with climate change superimposed on all these changes? Most people know all too well what this means for our bushland birds, but hard data on this is still rare.

Jim was involved in two very large surveys, one in 2002 and a follow-up in 2007, and through these, was hoping to understand better fauna response to landscape change.

In his talk, Jim introduced the concept 'extinction debt' to us. It describes extinction events that have been triggered a long time ago, and which, due to time lags and chance, will take many years to come to fruition, yet will do so inevitably sooner or later. They can be delayed by a series of 'good' years, but cannot be prevented without drastic action.

Through the data obtained by the two surveys, Jim and his team were trying to identify landscape attributes, which influence the trajectory of species loss or gain. This is important to answer questions about the most efficient distribution of conservation dollars that also makes the biggest possible impact (see question on page 3 for another example of such a question).

The work that Jim reported on, involved surveying birds in landscape sized plots of 10km x 10km. Ideally all characteristics of these plots will be similar, bar the various attributes whose significance you want to measure. Thus all plots were in areas with 450-600mm rainfall and all were in box-dominated woodland.
One of the landscape attributes tested was % tree-cover and this varied from 2-60% across the landscapes, another variable was contrasting patterns of vegetation aggregation. All up there were 10 survey sites per landscape. The first survey was done in 2002/2003.

A key finding from this work was that a threshold existed (10% tree cover) below which species richness plummeted sharply, but that bird species already dropped out at a great rate at 25-30% cover.

The single most important landscape attribute in explaining variation in species richness was found to be the extent of native vegetation.

It was realised at the time of data analysis, that this result represented only a snapshot in time. The team thus decided to repeat the survey in 2006/2007, so that changes with time can be identified with respect to the various landscape features. For this second survey, 24 landscapes were chosen (again 10 sites of each) over four survey sites.

When species richness was plotted against % cover, the same shape graph resulted as for the 2002/3 survey (a steep rise in species richness with increasing % cover, then a flattening out). The difference for the later survey was that the whole curve sat lower, in other words, there were less species overall across all landscapes.

Jim observed an overall drop of eight species per landscape, all of woodland birds. When comparing birds by their feeding habit, it became clear that larger losses were sustained by nectarivorous bids compared to insectivorous ones. This may have been due to a particularly bad year with respect to flowering during the survey, but as Jim stressed, such years will probably become the norm and there is no point seeing these as exceptions any more.

Of the relatively common birds found in 2002/3, about one third had decreased by over 50%, another third by 20-50% with most of the remaining ones by a lesser amount. Very few birds increased in number and this result was found across all landscapes.

Overall, of 128 species of woodland dependent birds, two-thirds (84) had declined, one third (43) remained unchanged and one species had increased.

For insectivorous birds there did not seem to be any particular landscape effect, while the nectarivorous birds had declined more in grazed landscaped compared to cropped landscapes). Variables that had an effect on the rate of change in this latter group, were tree cover, aggregation of vegetation and presence of riparian vegetation.

More change in species richness was seen in highly treed landscape. These landscapes had more species richness to begin with, and thus more potential to lose species. With the aggregation of vegetation, the most change was observed in the middle categories, and with the riparian landscapes, the most change was seen in the landscapes with small amounts of riparian presence.

Overall the results were devastating, but not unexpected and they showed clear signs of an operating extinction debt.

Are there any solutions in this depressing scenario? Yes, there are solutions, but they are not new, and scientists and governments have known about these for a long time. Addressing the ongoing habitat degradation, managing pests like rabbits and other feral animals, prescribing appropriate fire regimes provide some examples of how this miserable situation can be improved.

Bird numbers will not bounce back by sheer good luck, so we have to decide how important they are for us, before getting everyone on board and embarking on some of those seemingly inconvenient, difficult and costly solutions. To drive the message home further, it would be fantastic if another survey could be done in a few years time.

The mention of fire and prescribed burning always causes a barrage of comments and questions from members. May be we should prepare speakers for such sensitivities amongst the audience, but really – how do we know what burning regimes are best for what bird species and how many long-term, post-burning recovery studies have been done that looked at more than vegetation? Not many.

October 'Thing of the Night'

Presented by Rod Orr

Due to limited space, this interesting item did not get mentioned in the November Whirrakee. Rod has written the following comment on the beautiful orchid pictured below.
N.B. When Rod writes 'many years ago', he means 'MANY years ago'.

'This is a photo of a small part of the orchid, *Dendrobium speciosum*, which was brought to the October meeting because it had an interesting provenance.

Frank Robbins had given a small piece to Tom Patullo many years ago when it grew too large for its container. Tom grew his plant for many years before it also outgrew its pot and he divided it up. I was given one of the pieces (20 years ago) and it's grown larger year by year. My orchid has flowered for the last few years and has certainly performed better since Reg Smart advised me to feed it blood and bone fertilizer after it had flowered. Now that my plant is beginning to overfill its current large container, I'll soon have to break it up into a more manageable size.

So, the thought occurred to me that, if we continued this process, this orchid specimen should outlive us all!

Dendrobium speciosum
Occurs in northern Queensland to south-eastern Victoria. It grows naturally as a lithophyte or an epiphyte (Photographer: Rod Orr)

Diary

The General, Bird Observers Group and Fauna Study Group meetings are held at the Golden Square Senior Citizens Building, Old High Street, Golden Square, unless otherwise indicated.

General Meetings

Wednesday, December 10 6.30pm
Christmas break-up, shared dinner, bring some food to share. (BYO everything else)
Please Note – earlier starting time.
Speaker: Peter Ellis 'Folk Music'.

Note that there is no January meeting.

Wednesday, February 11
7.30pm
In the first meeting of the year, members often bring holiday (or other interesting) slides along to share with other members (unless the syllabus organiser has a surprise speaker organised)

Excursions
Contact Richard Goonan if you have any comments, questions or suggestions for excursions (ph 0423418815).

Fauna Group
This group meets (in the clubrooms) on the fourth Wednesday of the month at 7.30pm.

Regular Fauna Excursions
Every Friday morning starting at around 9 to 9:30, the Fauna Group inspects nest boxes in the Spring Gully area. The excursions are led by Maurie Lewis, 16 Vains St. Golden Square. Phone 0407 427 179 or 5442 1813. Phone Maurie to confirm exact departure times and location. If you don't phone but go directly to Maurie's house and find nobody at the house between 9 and 9:30 then the excursion is not on.

Wildlife Rescue & Information Network Inc.
W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Sustainability and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433.

Fenner Conference on the Environment, through the Australian Academy of Science 10-12 March 2009, The Shine Dome, Canberra, Australia.

Australia invests billions of dollars in restoring landscapes, protecting biodiversity and managing invasive weeds and pests. Do we get good environmental returns on this investment? Are the decisions we make transparent, accountable and defensible? Could we do better? How do we make decisions in the face of growing uncertainty? These big questions addressing big issues lie at the heart of the 2009 Fenner Conference on the Environment. Running over two days at the Shine Dome in Canberra in March 2009, this conference will bring together a galaxy of decision-making stars from the research, management and policy arenas. If you have any interest or responsibility for environmental decision making in your organisation then this is one conference you can't afford to miss.

Numbers are limited ; register at:
http://www.conferenceplus.com.au/fennerconf/2009/